



Introduction

Healthy Arizona 2010 presents an opportunity for all Arizona residents to improve their health. Whether through participation as part of an organization, or through a personal commitment to change, Healthy Arizona 2010 can belong to every person in our state.

The impetus for Healthy Arizona 2010 comes from the national Healthy People 2010 model. Healthy People began in 1979 as a comprehensive, nationwide health promotion and disease prevention agenda. HP2010 is designed to serve as a road map for improving the health of all people in the United States during the first decade of the 21st century.

Building on the preceding *Healthy People 2000* initiative—which was driven by an ambitious, yet achievable, 10-year strategy for improving the Nation's health by the end of the 20th century—Healthy People 2010 is designed to achieve two overarching goals:

- Increase quality and years of life, and
- Eliminate health disparities.

At the national level, these two goals are supported by 467 specific objectives in 28 focus areas. Each objective was developed with a target to be achieved by the year 2010.

Developing Arizona's Plan

Here in Arizona, a plan has been developed that focuses on **twelve** areas with **52 specific objectives**.

In order to prioritize Arizona's issues from the original twenty-eight areas described in Healthy People planning documents, a core planning team surveyed both internal Arizona Department of Health Services (ADHS) bureaus and representatives of communities throughout the state. In reviewing the *Ten Leading Health Indicators* (LHI) released by the Office of the Surgeon General in January 2000, the team saw a close match with Arizona's developing list of priorities and decided to adopt the LHI. Two adaptations to the list were made: *Nutrition* replaced *Overweight and Obesity* and *Infectious Disease* was added to *Immunization*. Subsequently, two more areas were added bringing the total to twelve: *Maternal and Infant Health* and *Oral Health*.

The focus areas for the plan are:

Physical Activity

Nutrition

Tobacco Use

Substance Abuse

Responsible Sexual Behavior

Mental Health

Injury and Violence Prevention

Environmental Health

Immunization/Infectious Disease

Access to Care

Maternal and Infant Health

Oral Health

Selecting Objectives and Strategies

Each of these areas has specific objectives that were developed by action teams led by the Arizona Department of Health Services and business and community partners. The draft objectives were released for public comment in August, 2000. As a result of the community meetings, several objectives were changed and some were added.

In September, 2000, the action teams reconvened to develop strategies, and as planning continued, many more community participants were included in the process. (see appendix A) Each planning team has had the task of identifying current strategies, determining whether they are working, and then identifying those strategies that need to be retained, replaced or eliminated.

Since an overarching goal in this plan is to address the disparities that exist in so many of our health indicators, each action team paid close attention to those disparities in their work and committed to including on their teams, participants who reflect Arizona's geographic and ethnic diversity. Each focus area in this plan is unique. The Physical Activity team brought

together people from every part of the state and developed multiple strategies divided into clusters that can be implemented by different sectors of the community. In contrast, the Environmental Health team based its strategies on a well-developed plan that had already been in place; the team leader queried members of an ongoing environmental task force to assure consensus with 2010 strategies.

Setting Targets for the Year 2010

Each of the twelve action teams looked for existing data sources for their objectives. In those instances where no source exists, such as the objective to increase the level of Physical Activity in children, data will be developed through survey methods. Once baseline data, or a start point, has been collected, it will be possible to set a target and measure progress. Those measures will be shared through annual updates to this plan. The complete table of objectives and their measurements follows the focus area section.

In reviewing many of the objectives you will see the baseline measure that already exists, the source of the data, and the target for the year 2010 that has been established.

In reviewing draft targets with Arizona communities, ADHS was advised to keep targets ambitious but also realistic. For example, though we would all like to see 100% access to health insurance at the end of this decade, the team was encouraged to set 90% as the target. Should that target be reached by 2006, a higher percentage could be set as the 2010 target.

Making Progress Together

One of the most compelling and encouraging lessons learned from the Healthy People 2000 initiative is that we, as a Nation, can make dramatic progress in improving the Nation's health in a relatively short period of time. For example, during the past decade, we achieved significant reductions in infant mortality. Childhood vaccinations are at the highest levels ever recorded in the United States. Fewer teenagers are becoming parents. Overall, alcohol, tobacco, and illicit drug use is leveling off. Death rates for coronary heart disease and stroke have declined. Significant advances have been made in the diagnosis and treatment of cancer and in reducing unintentional injuries. But we still have a long way to go. Diabetes and other chronic conditions continue to present a serious obstacle to public health. Violence and abusive behavior continue to ravage homes and communities across the country. Mental disorders continue to go undiagnosed and untreated. Obesity in adults has increased 50 percent over the past two decades. Nationally, nearly 40 percent of adults engage in no leisure time physical activity and smoking among adolescents has increased in the past decade. HIV/AIDS remains a serious health problem, now disproportionately affecting women and communities of color.

At the state level we can use Healthy Arizona 2010 as the guiding instrument

for addressing these and emerging health issues, reversing unfavorable trends, and expanding past achievements in health.

Impact of Individual Lifestyle on Health

Many of the focus areas chosen for this initiative relate directly to individual lifestyle choices. While public health in the past dealt with containing and eradicating infectious diseases such as influenza and polio, today we are challenged by the task of motivating change at the individual level. The Centers for Disease Control and Prevention have provided the following individual health analysis:

Effects On A Person's Health Status:		
Lifestyle	=	51%
Genetics	=	20%
Environment	=	19%
Health Care	=	10%

Clearly, the risk factors associated with most chronic diseases can be reduced by commitment to physical activity, healthy nutrition, avoidance of tobacco, etc. As a prevention agenda, Healthy Arizona 2010 will emphasize these areas for very broad statewide involvement.

The Relationship Between Individual and Community Health

Over the years, it has become clear that individual health is closely linked to community health—the health of the community and environment in which individuals live, work, and play. Likewise, community health is profoundly affected by the collective beliefs, attitudes, and behaviors of everyone who lives in the community.

The underlying premise of Healthy Arizona 2010 is that the health of the individual is almost inseparable from the health of the larger community.

How Communities Will Make Healthy Arizona 2010 Successful

Beginning in 2001, communities throughout Arizona will be invited to set their own 2010 goals and to link with the statewide effort through specific projects. Participating organizations can include county and tribal health departments, cities and towns, schools and universities, employers, religious organizations, hospitals and health associations, services organizations, etc. In other words, any and every group who is concerned with improving our health as a state.

In order to become a participant, groups will identify the plan objective(s) that they will be working on and either select strategies from the text of the plan or submit strategies of their own. All Community Partnership Projects will be tracked and shared through the Healthy Arizona 2010 website and yearly update publications. In addition, each of these projects will be considered for recognition at annual Healthy Arizona 2010 events.

Examples of the projects that community groups can develop could include sending out immunization reminders, establishing local hotlines, changing school cafeteria menus, establishing worksite fitness programs, assessing school health education curriculums, and sponsoring health fairs.

Work that has already begun should be included. Healthy Arizona 2010 will attempt to "connect the dots" and integrate much of the outstanding work that communities are currently doing.

Healthy Gente

A special community effort is being undertaken in the Arizona border region. Healthy Gente (incorporating the Spanish word for *people*) outlines a health promotion and disease prevention agenda through the year 2010 for the U.S. communities that border Mexico. Healthy Gente draws on the national health objectives defined in Healthy People 2010, identifying 25 of the most important objectives for the distinct needs and concerns of the border. This initiative aims to develop preventive goals, objectives and strategies, resulting in a strategic management tool that will be used by the four U.S. border states, communities and many other public and private sector partners. The idea of establishing health objectives for the border region was an outgrowth of preparatory work for the U.S.-Mexico Border Health Commission, a group designed to serve as a forum for addressing critical health issues in the border region.

In Arizona, Healthy Gente is being coordinated by the Border Health Office in the ADHS Division of Public Health. Community representatives from both Arizona and Sonora, Mexico are working to develop their Healthy Gente plan in collaboration with the Healthy Arizona 2010 plan.

Four principles are being used to guide the selection of objectives: a) they should address key health issues on the border; b) they should be limited in number; c) to the extent possible, the objectives should be measurable; and d) they should be compatible with federal and state objectives. The goal is to develop a set of objectives that will resonate with the border population, will be easily understood, and will help to coordinate public and private health programs.

Local Project Criteria

All local projects may be submitted and registered as part of the Healthy Arizona 2010 effort that meet the following criteria:

1. Link directly to one or more Plan objective;
2. Clearly define one or more specific strategies that the project will implement;
3. Actively involve members of the local community;
4. Describe a plan for evaluation of project outcomes/effectiveness;
5. Be willing to share data and findings with other Arizona communities.

Communities will also be asked to identify measures that they are taking to address disparities. A form for project submission is included in Appendix C and is available on the Healthy Arizona 2010 website (www.hs.state.az.us).

It's About You

Regardless of your age, gender, education level, income, race, ethnicity, language, religious beliefs, disability, sexual orientation, geographic location, or occupation, Healthy Arizona 2010 is designed to be a valuable resource in determining how you can participate most effectively in health improvement. Perhaps you will recognize the need to be a more active participant in decisions affecting your own health or the health of your children or loved ones. Perhaps you will assume a leadership role in promoting healthier behaviors in your neighborhood or community. Or perhaps you will use your influence to advocate for and implement new policies and programs at the city or state level. Whatever your role, this document is designed to help you determine what you can do help improve Arizona's health.



Twelve Focus Areas

- Physical Activity
- Nutrition
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury & Violence Prevention
- Environmental Health
- Immunization & Infectious Diseases
- Access to Care
- Maternal/Infant Health
- Oral Health

Physical Activity

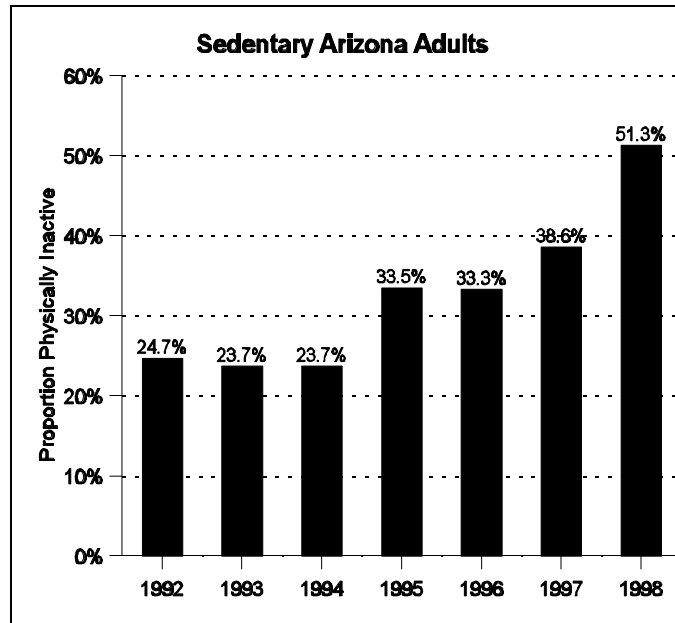
Regular physical activity is associated with lower death rates for adults of any age, even when only moderate levels of physical activity are performed. Regular physical activity decreases the risk of death from heart disease, lowers the risk of developing diabetes, and is associated with a decreased risk of colon cancer. In addition, it helps prevent high blood pressure and helps reduce blood pressure in persons with elevated levels. Regular physical activity also:

- Increases muscle and bone strength.
- Increases lean muscle and helps decrease body fat.
- Aids in weight control and is a key part of any weight loss effort.
- Enhances psychological well-being and has been shown to reduce the risk of developing depression.

In addition, children and adolescents need weight-bearing exercise for normal skeletal development, and young adults need such exercise to achieve and maintain peak bone mass. Older adults can improve and maintain strength and agility with regular physical activity. This can reduce the risk of falling, helping older adults maintain an independent living status. Regular physical activity also increases the ability of people with certain chronic, disabling conditions to perform activities of daily living.

According to the Behavioral Risk Factor Survey (BRFS), the percentage of Arizonans who are physically active decreased from 76.3% in 1994 to 48.7% in 1998. The Centers for Disease Control and Prevention (CDC) ranked Arizona last among the 50 states for its percentage of adults who reported leisure time physical activity. Low income individuals (<\$10,000/year) were found to be at greater risk for sedentary lifestyle (45.6%) while those with higher incomes (>\$75,000/year) were at lower risk (16.8%). The Arizona Department of Health Services has declared an epidemic of sedentary lifestyle due to the high numbers of individuals that report no physical activity.

The strategies in this focus area are broken out into several clusters that delineate what can be done in schools, at the worksite, through public awareness, etc., to improve our level of physical activity. Only through a comprehensive commitment to this issue can we decrease the threat of chronic disease in the lives of Arizonans.



Source: BRFSS monthly surveys (state weighted each year, not age standardized).

Objective #1 **Increase the proportion of children who participate in cumulative intermittent physical activity for 60 minutes per day. (Note: Ideally, blocks of activity should be at least 15 minutes.)**

Objective #2 **Increase the proportion of adolescents who engage in either moderate or vigorous physical activity. (Adolescents = ages 12-18, grades 7-12.)**

Youth and adolescents

School Strategies (designations in parentheses are taken from CDC's Guidelines for School and Community Programs Promoting Lifelong Physical Activity)

- Strategy 1.1 Require and increase time spent in physical education. (Policy)
- Strategy 1.2 Provide funding and equipment to promote physical activity in schools. (Policy)
- Strategy 1.3 Emphasize participation in lifetime activity. (Physical Education Curricula and Instruction)

- Strategy 1.4 Integrate physical activity into the school day by incorporating physical activity into classes. (Physical Activity Curricula and Instruction)
- Strategy 1.5 Require and increase school time, such as recess and regular activity breaks throughout the school day, for unstructured physical activity. (Environment)
- Strategy 1.6 Promote safe spaces and facilities for physical activity (including safe routes to increase walking to school and safe after school play places). (Environment)
- Strategy 1.7 Provide and promote more after school programs that foster physical activity. (Extracurricular Activities)
- Strategy 1.8 Provide and promote intramural programs that offer diverse, developmentally appropriate physical activities, both competitive and noncompetitive. (Extracurricular Activities)
- Strategy 1.9 Increase the qualifications of teachers, coaches, recreation, health care staff, and other school personnel to promote enjoyable, lifelong physical activity among children. (Training)

Family Strategies (designations in parentheses are taken from CDC's Guidelines for School and Community Programs Promoting Lifelong Physical Activity)

- Strategy 2.1 Increase awareness of the importance of physical activity, available resources, and how to get involved in enjoyable, lifelong physical activity. (All)
- Strategy 2.2 Promote family involvement in physical activity. (Family Involvement)
- Strategy 2.3 Decrease inactive time at home and in the community. (Family Involvement, Community Programs)

*Community Strategies (designations in parentheses are taken from **CDC's** Guidelines for School and Community Programs Promoting Lifelong Physical Activity)*

- Strategy 3.1 Increase awareness of the importance of physical activity, available resources, and how to get involved in enjoyable, lifelong physical activity. (All)

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| Strategy 3.2 | Decrease inactive time at home and in the community. (Family Involvement, Community Programs) |
| Strategy 3.3 | Provide and promote use of a range of developmentally appropriate community sports and recreation programs that are attractive to all young persons. (Community Programs) |
| Strategy 3.4 | Provide and promote use of physical and social environments that encourage and enable young persons to engage in safe and enjoyable physical activity. (Environment) |
| Strategy 3.5 | Promote peer group activities. (Environment, Community Programs) |

Adults

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| Objective #3 | Increase the proportion of adults who engage regularly, preferably daily, in moderate or vigorous physical activity. |
| Objective #4 | Reduce the proportion of adults who engage in no physical activity. |

Employer/Worksite Strategies

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| Strategy 1.1 | Develop and implement programs that promote physical activity in the workplace. |
| Strategy 1.2 | Increase access to worksite facilities that promote physical activity. |
| Strategy 1.3 | Promote workplace policies and practices that promote physical activity (such as flexible hours, activity breaks, and incentives). |
| Strategy 1.4 | Promote partnerships between employers and health clubs. |

Public Awareness

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| Strategy 2.1 | Promote physical activity among adults by increasing public awareness via a media campaign. Promote lifestyle physical activity among older adults by increasing public awareness via a media campaign and use of |
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newsletters and other sources. Include messages with a common theme that are motivational to older adults and that promote cardiovascular activity as well as activities that build bones and muscle mass.

- Strategy 2.2 Conduct formative research to identify best approaches to different target populations with a goal of making physical activity the norm. Focus on instigating and maintaining involvement in physical activity.

Health Care Providers

- Strategy 3.1 Promote physical activity among adults by working through health care providers.
- Strategy 3.2 Promote physical activity among older adults by working through health care providers (using such strategies as provider education, promulgation of health guidelines that promote physical activity, use of physical activity prescriptions, and financial incentives.)

Community Strategies

- Strategy 4.1 Promote public policies that foster physical activity among adults, including insurance company policies.
- Strategy 4.2 Provide and promote use of community facilities and safe places to foster physical activity among adults and older adults (such as bike trails and walking paths; need to consider lighting, shade, and other safety issues; work with schools, cities, and developers).
- Strategy 4.3 Provide and promote family physical activity. Promote inter-generational approaches to increasing physical activities.
- Strategy 4.4 Schedule community activities that promote physical activity at convenient times.
- Strategy 4.5 Identify and work to reduce/eliminate barriers to participation in physical activity (such as providing child care, offering free/low cost activities, and promoting peer group activities; include socialization opportunities for older adults).
- Strategy 4.6 Establish community coalitions that promote physical activity.

- Strategy 4.7 Provide and promote programs that focus on moderate activity for people who have not been physically active. Include focus on lifestyle activity such as walking, gardening, and housework.
- Strategy 4.8 Conduct formative research to determine effective means for reaching this population.
- Strategy 4.9 Promote peer group support for older adults to foster physical activity. ("Fitness Corps")

The 1988 *Surgeon General's Report on Nutrition and Health* stated "Diseases of dietary excess and imbalances rank among the leading causes of illness and death in the United States, touch the lives of most Americans, and generate substantial health care costs" Furthermore, dietary factors are associated with 4 of the 10 leading causes of death.

Over the past ten years, there has been a significant increase in the number of overweight or obese persons. Overweight or obesity is associated with a number of diseases. These diseases are hypertension, stroke, coronary heart disease, type 2 diabetes, and some types of cancer.

Heart disease is the nation's and Arizona's leading cause of death. The major dietary-related risk factors for developing cardiovascular disease are hypertension, obesity and high blood cholesterol. All three of these risk factors can be prevented with dietary and lifestyle changes.

Cancer is the second leading cause of death in the United States. There were 8,851 cancer deaths in Arizona in 1999. Cancer is mostly a preventable disease with the chief causes being tobacco and inappropriate diet. Eating five servings of fruits and vegetables a day can reduce cancer rates by 20%.

Diabetes is the eighth leading cause of death in the United States and it is the seventh leading cause of death in Arizona. Successful nutrition intervention which controls the individual blood sugar level can prevent the onset of diabetes complications.

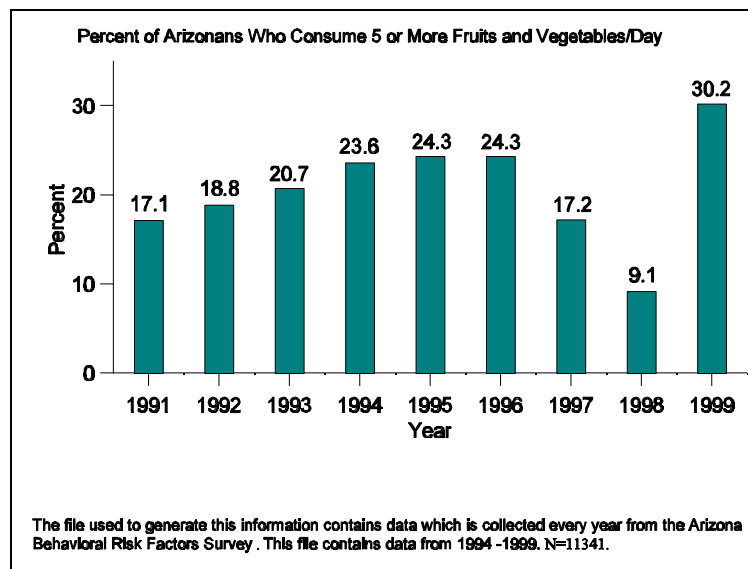
When we examine the nutritional status of Arizonans, we find:

- The five year average 1994 - 1999 shows that 47.2% of Arizonans are considered overweight with a Body Mass Index greater than 25.0.
- The five year average 1994 - 1999 shows that only 22.2% to 23.0% of Arizona residents eat 5 or more fruits and vegetables per day.
- Information from the 1995 University of Arizona Prevention Center Dietary Profile reveals that 40.1 % of Arizonans consume a diet which contains <10% saturated fat and 42.0% of Arizonans consume a diet which contains <30% total fat per day.
- Information from the 1995 University of Arizona Prevention Center

Dietary Profile shows that 22.5% of Arizonans consume 100% RDA (Recommended Daily Amount) of calcium.

- It is estimated that 13.8% of Arizona households are food insecure¹.

According to the American Dietetic Association, the goals of nutrition preventive care are to keep people healthy in their communities, reduce the incidence and severity of preventable diseases, improve health and quality of life, and reduce total medical costs, specifically costs for medication, hospitalization and extended care.



- Objective #1 Reduce iron deficiency anemia among infants, young children and females of childbearing age.**
- Strategy 1.1 Incorporate anemia prevention messages with existing programs, i.e. nutrition network, head start, food stamp program, beef council.
- Strategy 1.2 Develop a partnership between physician community and WIC to provide consistent anemia messages regarding intervention.
- Strategy 1.3 Develop a statewide protocol for referral and nutrition intervention.

¹ Food Security: Access by all people at all times to enough food for an active, healthy life. It includes at a minimum (1) the ready availability of nutritionally adequate and safe foods, and (2) and assured ability to acquire acceptable foods in socially acceptable ways.

Strategy 1.4	Investigate factors within the population and WIC system that would result in higher values (needs clarification).
Strategy 1.5	Track correlation between WIC nutrition education and corresponding client anemia rates.
Objective #2	Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit and at least three daily servings of vegetables, with at least one-third being dark green or deep yellow vegetables.
Strategy 2.1	Promote increased consumption of fruits and vegetables in schools through classroom education, food service, activity/sports programs and parent education.
Strategy 2.2	Promote increased consumption of fruits and vegetables through the media, public relations activities and community events.
Strategy 2.3	Promote increased consumption of fruits and vegetables in retail and other settings such as grocery stores, farmer's markets and community gardens.
Strategy 2.4	Promote increased consumption of fruits and vegetables in food and nutrition programs as WIC, food stamps, EFNEP, Head Start, school lunch and breakfast and the Arizona Nutrition Network.
Objective #3	Increase food security among AZ households, and in doing so, reduce hunger.
Strategy 3.1	Develop statewide and local food councils in Arizona for the coordination of planning and policy around food security.
Strategy 3.2	Ensure availability and access to food through better coordination of programs and services.
Strategy 3.3	Develop public awareness / education marketing plan on food and nutrition availability.
Objective #4	Increase the proportion of children, adolescents and adults who are at a healthy weight. Gather data by age group.

Strategy 4.1	Establish baseline data by using existing data (BRFSS-WIC-Head Start).
Strategy 4.2	Establish baseline data by developing partnerships with schools, universities, aging and adult programs and other community agencies.
Strategy 4.3	Develop a strategy to pursue funding to create a data infrastructure and interventions.
Strategy 4.4	Establish a protocol that provides a target measure for the population grouping by age.
Objective #5	Increase the proportion of persons aged 2 years and older who meet dietary recommendations for calcium.
Strategy 5.1	Promote increased consumption of calcium through schools including classroom education, policy change, physical activity opportunities, menu changes, staff training, health education and parent programs. (Note: need baseline and measurement strategies.)
Strategy 5.2	Promote increased consumption of calcium through healthcare providers and programs such as women's health programs, obstetricians, gynecologists, community health centers, pharmaceutical companies and pediatricians.
Strategy 5.3	Promote increased consumption of calcium incorporating Arizona nutrition network common messages and strategies into food and nutrition programs such as WIC, food stamps, EFNEP, Head Start, school lunch and breakfast and other programs.

Tobacco Use

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined.

Tobacco-related deaths number more than 430,000 per year among U.S. adults, representing more than 5 million years of potential life lost. Direct medical costs attributable to smoking total at least \$50 billion per year.

In 1999, 35 percent of adolescents were current cigarette smokers. In 1998, 24 percent of adults were current cigarette smokers.

Smoking is a major risk factor for heart disease, stroke, lung cancer, and chronic lung diseases—all leading causes of death. Smoking during pregnancy can result in miscarriages, premature delivery, and sudden infant death syndrome. Other health effects of smoking result from injuries and environmental damage caused by fires.

In Arizona, a CDC report released in November 2000, showed Arizona to be near the bottom among the states when it comes to smoking by adults. Arizona had a rate of 20 percent, based on one 1999 survey. According to an ADHS survey, 23.8 percent of Arizona adults reported smoking in 1996. In 1999, the number was down to 18.8 percent. This represented a 21 percent decrease in smokers. .

The greatest challenge that remains is reduction of tobacco use among adolescents whose rates tend to be higher here, as in the rest of the nation.

Second-hand tobacco smoke, which is also a significant threat to health, is addressed in the section on Environmental Health (p.34).

Objective #1 Reduce tobacco use by youth in 6th - 8th grades.

Strategy 1.1 Build and maintain Arizona Department of Health Services' (ADHS) capacity to effectively and efficiently administer a statewide tobacco control program (i.e. TEPP).

Strategy 1.2	Develop and support community-based tobacco control programs which provide comprehensive services (i.e. Local Projects)
Strategy 1.3	Establish a statewide tobacco control clearinghouse which can provide information, referrals, educational materials, technical assistance, and training (i.e. ATIN).
Strategy 1.4	Establish a statewide mass media campaign which promotes comprehensive tobacco control using television, radio, print, outdoor, and other appropriate media.
Objective #2	Reduce tobacco use by adolescents in 9th - 12th grades.
Strategy 2.1	Build and maintain Arizona Department of Health Services' (ADHS) capacity to effectively and efficiently administer a statewide tobacco control program (i.e. TEPP).
Strategy 2.2	Develop and support community-based tobacco control programs which provide comprehensive services (i.e. Local Projects).
Strategy 2.3	Establish a statewide tobacco control clearinghouse which can provide information, referrals, educational materials, technical assistance, and training (i.e. ATIN).
Strategy 2.4	Establish a statewide toll-free telephone help line for information, materials, referrals, and assistance with tobacco dependence (i.e. ATIN, ASHline).
Strategy 2.5	Establish a statewide mass media campaign which promotes comprehensive tobacco control using television, radio, print, outdoor, and other appropriate media.
Objective #3	Reduce tobacco use by adults.
Strategy 3.1	Build and maintain Arizona Department of Health Services' (ADHS) capacity to effectively and efficiently administer a statewide tobacco control program (i.e. TEPP).
Strategy 3.2	Develop and support community-based tobacco control programs which provide comprehensive services (i.e. Local Projects).

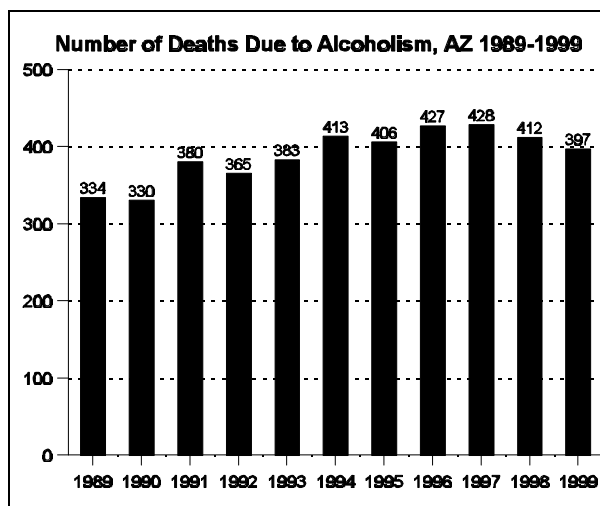
- Strategy 3.3 Establish a statewide tobacco control clearinghouse which can provide information, referrals, educational materials, technical assistance, and training (i.e. ATIN).
- Strategy 3.4 Establish a statewide toll-free telephone help line for information, materials, referrals, and assistance with tobacco dependence (i.e. ATIN, ASHline).
- Strategy 3.5 Establish a statewide mass media campaign which promotes comprehensive tobacco control using television, radio, print, outdoor, and other appropriate media.

Substance Abuse

The problem of substance abuse and dependence has long troubled the Nation, requiring balance among concerns for public safety, moral values, and health. Advances in science have reshaped our understanding of addiction and created an array of effective behavioral and pharmacological interventions. Unfortunately, between 13 million and 16 million people need treatment for alcoholism and/or drugs in any given year, but only 3 million actually receive care (SAMHSA, 1999).

In Arizona, substance abuse treatment offers an opportunity for thousands to reclaim their lives and rebuild families and careers shattered by alcoholism and drug dependency. Over the past 20 years, a body of evidence has established the potential of treatment to produce positive change and to dramatically reduce the social and healthcare costs of addictive disorders. In particular, substance abuse treatment reduces street crime, restores gainful employment, reduces risk-taking lifestyles, and relieves a host of public health costs associated with HIV disease, fetal substance exposure, debilitating disease, and substance-related mental health problems, such as domestic violence, suicide and chronic depression.

In addition to treatment, research has demonstrated that sound prevention efforts and programs can reduce the incidence and onset of substance abuse and related problems, thereby preventing the need for treatment and social services. By addressing conditions that directly affect individuals, families, and communities, prevention programs and strategies work to foster the health of Arizona residents.



Objective #1	Reduce mortality related to alcohol use.
Strategy 1.1	Continue ADHS involvement in collaborative planning, funding, and system coordination through Governors Strategic Plan for Substance Abuse and the Governors Drug and Gang Policy Council.
Strategy 1.2	Reduce entry barriers to improve rapid access to treatment and targeted outreach to vulnerable AOD (Alcohol & other drugs) populations (disabled, ethnic minorities, HIV infected individuals, women w/ children).
Strategy 1.3	Continue ADHS involvement in Substance Abuse Consortia to improve and promote evidence - based AOD treatment and effective treatment systems.
Objective #2	Reduce mortality related to drug abuse.
Strategy 2.1	Continue ADHS involvement in collaborative planning, funding, and system coordination through Governors Strategic Plan for Substance Abuse and the Governors Drug and Gang Policy Council.
Strategy 2.2	Reduce entry barriers to improve rapid access to treatment and targeted outreach to vulnerable AOD (Alcohol & other drugs) populations (disabled, ethnic minorities, HIV infected individuals, women w/ children).
Strategy 2.3	Continue ADHS involvement in Substance Abuse Consortia to improve and promote evidence - based AOD treatment and effective treatment systems.
Objective # 3	Increase the percentage of Junior High / Middle school students who abstain from substance use.
Strategy 3.1	Engage communities, community members, stakeholders, and interested parties on youth-related substance abuse issues.
Strategy 3.2	Support an enhanced resource base for behavioral health prevention programs.
Strategy 3.3	Secure adequate funds to support continued ADHS Needs Assessment so resources and programs can be matched to geographic areas and populations based on need.

Strategy 3.4 Promote the use of comprehensive research-based strategies which address multiple life domains. Advocate for social policies which support healthy children, families, and communities.

Objective #4 Reduce the percentage of alcohol related traffic fatalities.

Strategy 4.1 Launch a public / private initiative in partnership with Mothers Against Drunk Drivers (MADD), and Arizona Department of Health Services (ADHS) / Emergency Medical Services (EMS) to improve public awareness and identification of impaired drivers. The initiative will include local police departments in 5 metropolitan areas statewide. The target populations will be: 1) Underage drinkers, 2) Chronic re-offenders, 3) Impaired Drivers.

Strategy 4.2 Support the reduction of Blood Alcohol Concentration (BAC) legal limits to .08 in Arizona.



Responsible Sexual Behavior

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus that causes AIDS, can result from unprotected sexual behaviors. Abstinence is the only method of complete protection. Condoms, if used correctly and consistently, can help prevent both unintended pregnancy and STDs.

Nationally, in 1999, 85 percent of adolescents abstained from sexual intercourse or used condoms if they were sexually active. In 1995, 23 percent of sexually active women reported that their partners used condoms.

In the past 6 years there has been both an increase in abstinence among all youth and an increase in condom use among those young people who are sexually active. Condom use in sexually active adults has remained steady at about 25 percent.

Half of all pregnancies in the United States are unintended; that is, at the time of conception the pregnancy was not planned or not wanted. Unintended pregnancy rates in the United States have been declining. The rates remain highest among teenagers, women aged 40 years or older, and low-income women. Approximately 1 million teenage girls each year in the United States have unintended pregnancies. Nearly half of all unintended pregnancies end in abortion.

The cost to U.S. taxpayers for adolescent pregnancy is estimated at between \$7 billion and \$15 billion a year.

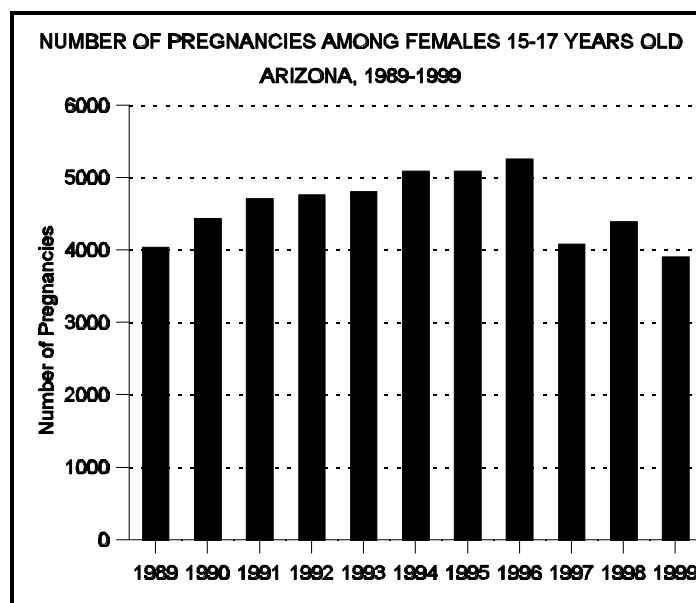
In Arizona, the teen pregnancy rate (age 15 - 17) dropped from a decade high of 65.4/1000 in 1994 to 40.2/1000 in 1999, significantly lower than the target (45) set by the Arizona 2000 plan.

Sexually transmitted diseases are common in the United States, with an estimated 15 million new cases of STDs reported each year. Almost 4 million of the new cases of STDs each year occur in adolescents. Women generally suffer more serious STD complications than men, including pelvic inflammatory disease, ectopic pregnancy, infertility, chronic pelvic pain, and cervical cancer from the human papilloma virus.

About one-half of all new HIV infections in the United States are among people under age 25 years, and the majority are infected through sexual

behavior. Compelling worldwide evidence indicates that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV infection.

Arizona is one of the few states that does not administer the Youth Risk Behavior Survey. Without the data from this survey of adolescents, there is no baseline measure of responsible sexual behavior that can be compared with national data or used as a measure of program effectiveness.



Objective #1 Increase the proportion of adolescents who abstain from sexual intercourse.

Strategy 1.1 Enhance collaboration among abstinence-only and abstinence-based groups.

Strategy 1.2 Implement comprehensive education in the school system.

Strategy 1.3 Expansion of school-age peer groups that promote abstinence.

Strategy 1.4 Enhance inter-generational interventions.

Strategy 1.5 Develop/enhance skills-building trainings for providers

- Objective #2 Increase the proportion of adolescents who use condoms if currently sexually active.**
- Strategy 2.1 Enhance youth programs to include greater accessibility, more peer-based interventions, and new venues for programs.
- Strategy 2.2 Amend existing HIV prevention legislation (ARS 15-716).
- Strategy 2.3 Develop/enhance Parent Education Programs.
- Objective #3 Reduce pregnancies among adolescents 15 –17 years old.**
- Strategy 3.1 Enhance community education and support.
- Strategy 3.2 Develop/enhance parent education programs.
- Strategy 3.3 Enhance youth programs.
- Strategy 3.4 Develop new media campaigns.
- Strategy 3.5 Enhance faith-based and culturally-specific programs.
- Strategy 3.6 Facilitate increased focus from health insurance plans on this objective.
- Objective #4 Reduce sexually transmitted diseases.**
- Strategy 4.1 Increase and enhance STD services, i.e., greater outreach, more multi-lingual services (personnel and literature), increased screening at Veteran’s Administration Medical Centers (VAMC), Well Woman Programs, outreach to older adults, better coordination of mobile services in Maricopa County.
- Strategy 4.2 Enhance communication and collaboration with private provider, correctional systems, VAMC, school nurses, drug treatment providers, HIV and HCV programs.
- Strategy 4.3 Increase funding for STD Services.
- Strategy 4.4 Utilize new testing and laboratory technologies.
- Strategy 4.5 Increase education, training, and access to information in schools and for adult leaders of adolescent groups.

- Strategy 4.6 Increase capacity building efforts.
- Strategy 4.7 Establish higher priority for tribal services.
- Objective #5 Implement the Youth Risk Behavior Survey (YRBS) and the relevant modules of the Behavior Risk Factor Surveillance System (BRFSS).**
- Strategy 5.1 Identify funding to implement both surveys.
- Strategy 5.2 Obtain agreement from Arizona Department of Education to implement YRBS
- Strategy 5.3 Implement both surveys in accordance with approvals and funding.

Arizona's 2010 Mental Health planning team selected depression and related disorders as a focus of activity as a result of the prevalence and the social, physical and economic impact of depressive disorders. Approximately 20 percent of the U.S. population is affected by mental illness during a given year; no one is immune. Of all mental illnesses, depression is the most common disorder. More than 19 million adults in the United States suffer from depression. As many as one in every 33 children and approximately one in eight adolescents may have depression. Major depression is the leading cause of disability and is the cause of more than two-thirds of suicides each year.

In Arizona, the 1997 suicide mortality rate among adolescents 15-19 years old was 23.7 per 100,000. This was the second highest rate in the U.S. At the other end of the age spectrum, suicide among older adults in our state is a major concern. In 1997, Arizona ranked third highest in suicides among those age 75 - 79 years old, (34.2/100,000).

From an economic standpoint, clinical depression is one of America's most costly medical illnesses, costing the economy over \$43.7 billion in absenteeism from work, lost productivity and direct treatment costs. Left untreated, depression is as costly to the American economy as heart disease or AIDS.

Depression can often be triggered by other chronic illnesses common in later life such as diabetes, cancer, stroke, heart disease, chronic lung disease, Alzheimer's disease, Parkinson's disease and arthritis. Depression occurs in 40-65% of patients who have experienced a heart attack, and in 18-20% of people who have coronary artery disease, but have not had a heart attack. It is often a co-occurring illness with substance abuse.

Depression is treatable. Available medications and psychological treatments, alone or in combination, can help 80 percent of those with depression. With adequate treatment, future episodes of depression can be prevented or reduced in severity. Treatment for depression can enable people to return to satisfactory, functioning lives.

Strategies to improve the diagnosis and treatment of depression in Arizona will include addressing stigma, promoting closer integration of behavioral and public health, and broadening awareness of depressive illness among primary care providers.

Prevalence of Depression

- # More than **19 million** Americans suffer from depression annually.
- # Women experience depression at roughly **twice the rate** of men.
- # The highest rates of depression occur among adults ages **25 to 44**.
- # Late-life depression affects some six million older adults, most of them women, but **only 10%** of these persons ever get treated.
- # Depressive symptoms occur in approximately **15%** of community residents **over age 65**.

Source: National Institute of Mental Health

Objective #1 Increase community knowledge and understanding of depression through collaboration with public and private agencies/businesses.

Strategy 1.1 Launch a communications campaign at the community level to increase understanding of depression and reduce its stigma.

Objective #2 Decrease the number of completed suicides for teens and older adults. (see also Injury & Violence Prevention Objective #3)

Strategy 2.1 Implement statewide replication of the O.P.T.I.O.N.S. (Offering Parents and Teens Information On Needless Suicide) program and other educational programs that address teen depression and suicide.

Strategy 2.2 Promote community prevention programs (such as the Gatekeeper model) that address the mental health needs of older adults.

Objective #3 Increase the number of individuals in AZ that are screened for depression and referred for treatment if needed.

Strategy 3.1 Educate and train Primary Care Physicians on the signs and symptoms of depression.

Strategy 3.2 Strengthen linkages between the behavioral health and public health communities.

Strategy 3.3 Create cross-disciplinary collaborations, e.g. use of depression screens at local health fairs.

Strategy 3.4 Increase support for identifying and responding to depression in the workplace.

Objective #4 Increase access to services for persons with depressive disorders.

Strategy 4.1 Develop and strengthen collaborative relationships among employers, health benefit payors, government and the public, to move toward increased mental health coverage.

Strategy 4.2 Educate employees about availability of existing mental health benefits.

Strategy 4.3 Promote policy changes to implement mental health insurance parity.



Injury & Violence Prevention

More than 400 Americans die each day from injuries due primarily to motor vehicle crashes, firearms, poisonings, suffocation, falls, fires, and drowning. The risk of injury is so great that most persons sustain a significant injury at some time during their lives.

Motor vehicle crashes are the most common cause of serious injury. In 1998, there were 15.6 deaths from motor vehicle crashes per 100,000 persons. Arizona's rate was 21 per 100,000.

In 1995, the cost of injury and violence in the United States was estimated at more than \$224 billion per year. These costs include direct medical care and rehabilitation as well as productivity losses to the Nation's workforce. The total societal cost of motor vehicle crashes alone exceeds \$150 billion annually.

Motor vehicle crashes are often predictable and preventable. Increased use of safety belts and reductions in driving while impaired are two of the most effective means to reduce the risk of death and serious injury of occupants in motor vehicle crashes.

Death rates associated with motor vehicle-traffic injuries are highest in the age group 15 to 24 years. In 1996, teenagers accounted for only 10 percent of the U.S. population but 15 percent of the deaths from motor vehicle crashes. Those aged 75 years and older had the second highest rate of motor vehicle-related deaths.

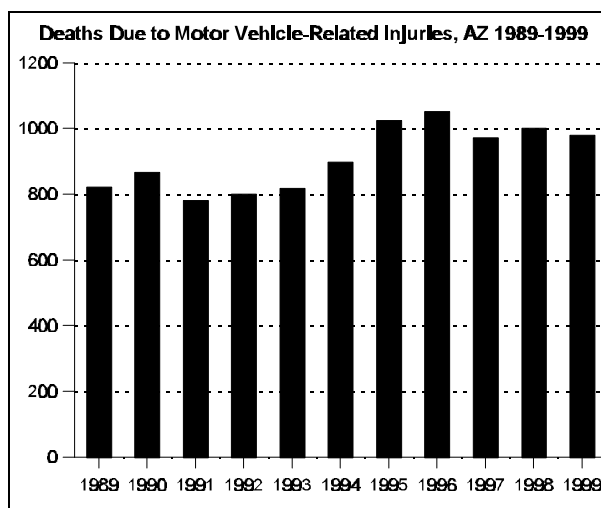
Because no other crime is measured as accurately and precisely, homicide is a reliable indicator of all violent crime. In 1998, the murder rate in the United States fell to its lowest level in three decades, 6.5 homicides per 100,000 persons. In Arizona, the rate of homicide was 10.4 per 100,000. Efforts to reduce community violence and illegal access to firearms can ultimately reduce this statistic.

Suicide rates in Arizona are particularly high among teens and older adults. Targeted initiatives to identify and respond to those at risk are already underway, working through social service agencies, schools and other community settings.

In 1997, Arizona ranked second in deaths due to drowning among children 0–4 years old. This rate has been increasing in recent years and calls for

renewed efforts to educate parents and the broader community about vigilance around swimming pools. Enforcement of barrier codes may also contribute to lowering the incidence.

Collecting data on abusive behaviors presents real public health challenges. Without common protocols that can be shared and aggregated, data is incomplete and there is no quantitative way to evaluate improvement. This problem is particularly true for domestic violence, which often goes unreported. Data collection efforts initiated at the local level need to be linked so that eventually, a system will be in place that can address data needs at all levels.



Objective #1 Reduce injury, disability and death caused by motor vehicle crashes.

- Strategy 1.1 Increase the proper use of occupant restraints.
- Strategy 1.2 Promote Zero tolerance for alcohol and other drug-related crashes.
- Strategy 1.3 Ensure adequate training of EMS providers who treat adults and children (statewide, rural, tribal, border).
- Strategy 1.4 Promote safe transportation environments. Identify high risk locations for motor vehicle crashes.
- Strategy 1.5 Enforce current aggressive behavior driving laws.
- Strategy 1.6 Promote helmet use.
- Strategy 1.7 Standardize the coding and reporting of crashes.

- Objective #2 Reduce deaths due to homicide.**
- Strategy 2.1 Promote collaborative efforts to analyze homicide data and develop local interventions.
- Strategy 2.2 Promote and enhance community-based initiatives aimed at reducing violent behavior.
- Objective #3 Reduce deaths due to suicide.** (see also Mental Health Objective #2)
- Strategy 3.1 Develop data driven intervention strategies for persons at risk, e.g., domestic violence, sexual assault, elderly, psychiatric disorders.
- Strategy 3.2 Provide access/enhance to mental health services for persons at risk.
- Strategy 3.3 Develop a community awareness/education program for the general public, schools (teachers, students, counselors), public safety professionals, health care professionals, mental health professionals (different strategies for each group).
- Strategy 3.4 Enhance guidelines/standards for suicide assessment and monitoring/precautions.
- Strategy 3.5 Enhance existing crisis lines to include peer warm-lines.
- Objective #4 Reduce deaths due to drowning.**
- Strategy 4.1 Expand incident data collection and monitor all calls involving immersion incidents for all counties in order to identify target populations and strategies.
- Strategy 4.2 Enforce barrier codes where they exist and adopt codes where they are nonexistent.
- Strategy 4.3 Provide ongoing education on drowning prevention and water safety for all water environments.
- Objective #5 Develop and/or enhance data systems for abusive behaviors (such as child abuse, elder abuse, intimate partner, family violence, rape and sexual assault).**

- Strategy 5.1 Identify existing data sources and establish a clearinghouse of existing data.
- Strategy 5.2 Establish public/private collaborations and partnerships that cross jurisdictional lines.
- Strategy 5.3 Explore the need for and feasibility of creating a statewide data collection system.
- Strategy 5.4 Identify resources to build an infrastructure necessary to support collection and analysis of data.

Environmental Health

An estimated 25 percent of preventable illnesses worldwide can be attributed to poor environmental quality. In the United States, air pollution alone is estimated to be associated with 50,000 premature deaths and an estimated \$40 billion to \$50 billion in health-related costs annually. Two indicators of air quality are ozone (outdoor) and environmental tobacco smoke (indoor).

In 1997, approximately 43 percent of the U.S. population lived in areas designated as nonattainment areas for established health-based standards for ozone. During the years 1988 to 1994, 65 percent of nonsmokers were exposed to environmental tobacco smoke (ETS). Poor air quality contributes to respiratory illness, cardiovascular disease, and cancer. For example, asthma can be triggered or worsened by exposure to ozone and ETS. The overall death rate from asthma increased 57 percent between 1980 and 1993, and for children it increased 67 percent.

Dramatic improvements in air quality in the United States have occurred over the past three decades. Between 1970 and 1997, total emissions of the six principal air pollutants decreased 31 percent. Still, millions of tons of toxic pollutants are released into the air each year from automobiles, industry, and other sources. In 1997, despite continued improvements in air quality, approximately 120 million people lived in areas with unhealthy air based on established standards for one or more commonly found air pollutants, including ozone.

In Arizona, progress has been made in the ozone level but failure to meet the EPA attainment standards for particulate matter is thought to contribute to morbidity and mortality due to Asthma and other respiratory illnesses, especially in the Phoenix metro area. Many public and private efforts are currently underway to achieve PM attainment well before the end of this decade.

Childhood lead poisoning is a significant environmental health problem, yet it is entirely preventable. Lead poisoning prevents children from reaching their full potential. Children, ages six years old and younger, are particularly susceptible to lead poisoning. Lead exposure prevention is key to ensure declining blood lead levels. Ingestion of lead, through hand-to-mouth behavior, is the primary pathway of exposure. The most frequently identified lead sources are lead-based paint and lead-based paint contaminated dust and soil. Lead-containing home remedies and imported pottery are important sources of lead exposure in Arizona. These sources

have caused the most severe cases of lead poisoning documented in the state.

Foodborne illness imposes a burden on public health and contributes significantly to the cost of health care. When unreported cases are taken into account, an estimated 76 million illnesses, 325,000 hospitalizations and 5,000 deaths each year may be associated with microorganisms in food. Reducing risk factors in food handling addresses three public food sources, institutions, restaurants and retail, and can significantly reduce exposure to this type of illness.

Exposure to ETS, or secondhand smoke, among nonsmokers is widespread. Home and workplace environments are major sources of exposure. Nationally, a total of 15 million children are estimated to have been exposed to secondhand smoke in their homes in 1996. ETS increases the risk of heart disease and respiratory infections in children and is responsible for an estimated 3,000 cancer deaths of adult nonsmokers. Efforts to decrease exposure by passing ordinances that ban smoking in public places have been successful in several Arizona communities and are gaining public acceptance.

Melanomas and other skin cancers were expected to claim the lives of 9,200 persons nationwide in 1999. Many skin cancers can be prevented by limiting exposure to the sun, by wearing protective clothing and by using sunscreen. In Arizona, where risk is so much greater than other parts of the US, it is critical that children be protected from sun exposure and that they develop a lifelong habit of prevention.

Objective #1 Ensure that all air in Arizona achieves United States Environmental Protection Agency (USEPA) attainment status for criteria air pollutants by 2010. This specifically includes particulate matter and ozone.

Strategy 1.1 Implement all current federally mandated particulate matter control measures.

Strategy 1.2 Implement all recommendations of the 2000 Brown Cloud Summit Task Force.

Objective #2 Reduce severe lead poisoning (Pb > 20 ug/dL) 75% by 2010. Reduce the prevalence of lead poisoning (Pb > 10 ug/dL) in Arizona by 50% by 2010.

- Strategy 2.1 Screen (by 2005) 100% of AHCCCS-eligible high risk children.
- Strategy 2.2 Implement a lead-based pottery and folk medicine campaign in high risk zip codes.
- Strategy 2.3 Continue current registry program, investigate cases and make appropriate intervention referrals.
- Objective #3 Reduce the prevalence of food borne illnesses in Arizona by reducing risk factors for food borne illness in restaurants and retail food establishments 25% by 2010.**
- Strategy 3.1 Adopt and implement (by 2001) a new food code in Arizona based on the Food and Drug Administration Model 1999 Food Code.
- Strategy 3.2 Establish (by 2002) Arizona baseline levels of compliance with foodborne illness risk factors using new food code regulations.
- Strategy 3.3 Fully implement (by 2004) the new food code rules, including 90% compliance with the requirement that the person in charge of all food establishments demonstrate adequate food safety knowledge.
- Strategy 3.4 Complete audits (by 2005) of all 15 county health departments and determine effectiveness of food safety programs.
- Objective #4 Improve indoor air quality in Arizona by eliminating environmental tobacco smoke in 100% of public buildings and 80% of semipublic buildings by 2010.**
- Strategy 4.1 Promote public policy to implement prohibitions on smoking in public and semipublic buildings in AZ municipalities.
- Objective #5 Increase the percentage of Arizona children that regularly use effective sun protection by 2010.**
- Strategy 5.1 Establish Arizona baseline levels of sun protection of children.

- Strategy 5.2 Implement an effective media and public service campaign to promote sun protection of children in Arizona.
- Strategy 5.3 Implement a sun protection program at municipal pools throughout Arizona.



Immunization & Infectious Diseases

Deaths from infectious diseases declined markedly in the United States during the 20th century. This decline contributed to a sharp drop in infant and child mortality and to a 29.2 - year increase in life expectancy. Public health actions to control infectious diseases during this period were based on 19th century discoveries of microorganisms as the cause of many serious diseases. Primarily, disease control resulted from improvements in sanitation, the implementation of universal childhood vaccination programs and the discovery and use of antibiotics.

Unfortunately, success in reducing morbidity and mortality from infectious diseases during the first three quarters of the last century led to complacency about the need for continued epidemiological vigilance and the continuous application of appropriate public health control measures. As a consequence, between 1980 and 1992, the number of deaths from infectious diseases rose 58 percent in the United States. Even when human immunodeficiency virus-associated diagnoses were removed from the analyses, deaths from infectious diseases still increased 22 percent during this period.

New infectious agents and diseases are being detected, some diseases once considered under control have reemerged in recent years and antibiotic resistance is evolving rapidly in both the hospital and community setting. It is clear that infectious diseases remain a major cause of illness, disability and death, exacting an unacceptable toll in terms of human suffering and economic resources. Indeed, many challenges remain before the public health goal of prevention and control of infectious diseases will be fully realized.

In Arizona, one of these challenges is an apparent increase in the number of reported cases of invasive *Streptococcus pneumoniae* disease. Since being made reportable by laboratories in 1997, the annual number of reported cases has been 460, 749 and 822 for the years 1997, 1998 and 1999 respectively. These cases tend to occur in the very young and very old. Fortunately, there are now vaccines that are effective in these groups and the possibility for reducing the incidence of this disease is very real.

Another disease for which a new vaccine offers hope of prevention is hepatitis A. Historically, western states in general, and Arizona in particular, have reported the highest rates of hepatitis A in the United States. A variety of studies and control efforts prior to 1999 were universally unsuccessful in

reducing the overall incidence and regularly occurring epidemics of this disease. With the introduction of the hepatitis A vaccine a new strategy exists to reduce the effects of this miserable and costly affliction.

Treatment of diseases caused by bacteria is now compromised by an increasing prevalence of antibiotic resistant organisms. In Arizona, for instance, penicillin resistance in invasive pneumococcal isolates from children less than five years old increased from 32 percent in 1999 to 48 percent in 2000. Resistance to antibiotics means that infections once thought to be under control are now more difficult and expensive to treat. The causes of the observed increase are complex and the actions needed to reverse this trend will require the cooperative efforts of a public and private partnership involving a wide variety of groups.

Strategic vaccination campaigns have virtually eliminated diseases that previously were common in the United States, including diphtheria, tetanus, poliomyelitis, smallpox, measles, mumps, rubella and *Haemophilus influenzae* type b meningitis. However, the organisms that cause most of these diseases have not disappeared. Rather, they have receded and will reemerge if the vaccination coverage drops. Also, vaccines protect more than the vaccinated individual. If coverage is maintained at a high enough level, the causative organisms cannot circulate and cause disease in the few who are not or who cannot be vaccinated. Accordingly, the importance of sustaining an adequate level of coverage, particularly in young children, cannot be overemphasized. Nor should the importance of adult vaccinations be minimized. It is instructive to recall that in the century that witnessed the greatest reduction of infectious diseases, the world endured one of the most devastating epidemics in human history: the 1918 influenza pandemic that resulted in 20 million deaths, including 500,000 in the United States.

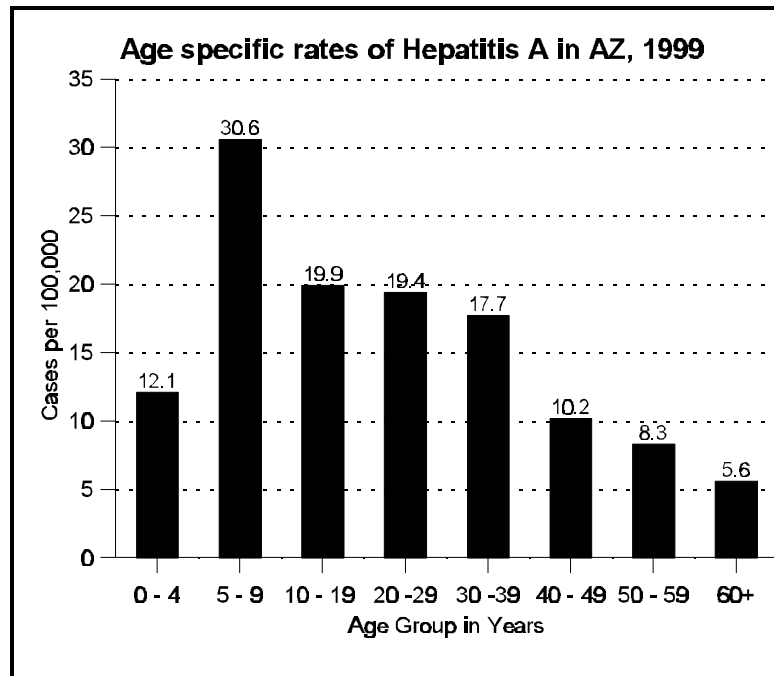
Objective #1 Increase the proportion of non-institutionalized older adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Strategy 1.1 Enhance and expand the promotion of PPV and influenza vaccinations in persons 65 and older in home healthcare settings, in dialysis centers and among diabetics.

Strategy 1.2 Incrementally increase the accessibility of PPV and influenza vaccinations to persons 65 and older through the following steps:

- Support Legislative initiations to permit pharmacists to vaccinate adults.

- Encourage Fire Departments to vaccinate adults in neighborhood clinics.
- Promote the use of emergency medical technicians to provide vaccinations in rural areas.
- Support a statutory requirement that hospitals vaccinate any unvaccinated person 65 and older who is admitted or seen in an emergency room



Objective #2 Reduce the rate of Hepatitis A.

- Strategy 2.1 Increase the recommended age group for hepatitis A vaccination incrementally from the current 2-5 years of age to 2-18 years of age and accompany these changes with educational and promotional campaigns.
- Strategy 2.2 Provide hepatitis A vaccinations to youths held in juvenile detention centers.
- Strategy 2.3 Implement the new ADHS Food Code rules which require that food handlers with symptoms suggestive of hepatitis A report their condition to their managers and be removed from food contact activities.

- Objective #3 Reduce the rate of new invasive pneumococcal infections (e.g. otitis media, meningitis, pneumococcal pneumonia) both in children under 5 years of age and in adults aged 65 years and older.**
- Strategy 3.1 Make available pneumococcal 7-valent conjugate vaccine (PCV7), both through the VFC program and by securing state funding for purchase of vaccine to meet the needs of those not covered by VFC and educate providers on the appropriate use of PCV7 and pneumococcal polyvalent vaccine (PPV) in children.
- Strategy 3.2 Develop and implement a statewide project to promote the appropriate use of pneumococcal vaccines in children through education of parents and providers.
- Strategy 3.3 Develop and implement a statewide project directed at senior citizens, healthcare providers and caregivers to promote the use of pneumococcal vaccine in persons 65 and older including a statutory requirement that hospitals vaccinate any unvaccinated person 65 and older who is admitted or seen in an emergency room.
- Objective #4 Increase the proportion of children 19 through 35 months of age who receive all of the following recommended vaccines: 4 DTaP, 3 polio, 1 MMR, 3 Hib and 3 hepatitis B.**
- Strategy 4.1 Introduce and promote the concepts of the AFIX program in private sector healthcare plans.
- Strategy 4.2 Improve the system for communicating immunization information relating to individual children between Arizona and its neighboring states and Mexico to assure completeness of immunizations.
- Strategy 4.3 Enhance reminder recall in all healthcare systems providing immunization services to assure completeness of immunization.
- Objective #5 Reduce the number of courses of antibiotics for ear infections for young children.**
- Strategy 5.1 Introduce and promote the “State of Arizona Group on Understanding Antibiotic Resistance” (S.A.G.U.A.R.O.) A coalition of over 30 partners with the following goals:

- Decrease the trend in antibiotic resistance
- Increase the quality of care and reduce the cost of treating bacterial infections
- Increase the knowledge level of all members of the caregiver team
- Create a greater level of public awareness around this issue

Strategy 5.2

Recommend and promote locally, national (or modified national) "Judicious Antibiotic Use Guidelines".

Access to Care

Improving access to quality health care is critical towards eliminating health disparities and increasing the quality and quantity of life for all Arizonans. In particular, improved access to clinical preventive services such as screening tests and immunizations can reduce the number of preventable diseases and conditions. To facilitate the provision of such preventive services, it is important that individuals and families have an identified source of ongoing primary health care, i.e., a medical home.

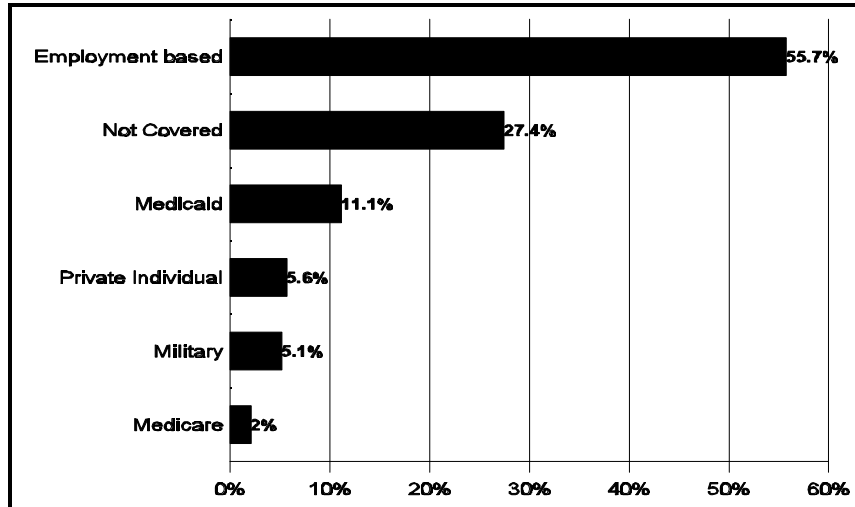
Unfortunately, Arizonans face severe barriers in accessing health care. For instance, data from the 1999 Current Population Survey (U.S. Census Bureau) indicates that 21.2% of all Arizonans lack health insurance coverage. Only Louisiana, Texas and New Mexico have higher rates of uninsurance. This high rate of uninsurance is troubling since uninsured individuals are more likely to report poor health status, delay seeking medical care and forego necessary care for potentially serious symptoms. Indeed, many uninsured Arizonans rely on hospital emergency rooms for primary and preventive care; it is estimated that 150,000 visits to Arizona hospital emergency rooms could be prevented through improved access to primary health care.

Culture and language represent another barrier to health care access. Arizona is 20% Hispanic and has the 2nd largest number of American Indians in the nation; this suggests the need for the broad availability of culturally competent health care. In addition, as baby boomers continue into middle age and beyond, the need for adequate long term care availability and geriatric care providers will increase. By 2010, it is estimated that over 900,000 Arizonans will be 65 years of age or older.

Physical distance and lack of transportation exacerbate problems in accessing health care, particularly in a state with the 6th largest land mass in the nation. Rural and frontier areas have difficulty in recruiting and retaining health care providers. Currently, 71 areas of Arizona are designated by the federal government as Health Professional Shortage Areas (HPSAs). These areas include shortages in primary care, dental and mental health providers.

Some progress has recently been made in improving access to health care in Arizona (e.g., KidsCare and Proposition 204). Additional efforts in the areas of provider cultural competency, long term care availability, clinical preventive services and provider distribution are needed in the next decade to confront disparities and ensure maximal quality and quantity of life for all Arizonans.

**Insurance Status-Arizonans Under Age 65-Current Population
Survey
3 Year Averages 1996-1998**



Source: U.S. Bureau of Census, Health Insurance Historical Tables 1999.

Objective #1 Increase the proportion of persons with health insurance.

- Strategy 1.1 Increase public awareness of the availability of health insurance and how to access it.
- Strategy 1.2 Simplify the eligibility and enrollment process for acquiring and maintaining health insurance.
- Strategy 1.3 Expand coverage under existing health insurance programs.
- Strategy 1.4 Create alternatives to existing health insurance programs.

Objective #2 Increase the proportion of persons who have a specific source of ongoing care (medical home).

- Strategy 2.1 Increase public awareness of the importance of having a specific source of ongoing care and how to access services.
- Strategy 2.2 Reduce barriers to utilization of a specific source of ongoing care.
- Strategy 2.3 Expand availability of sources of ongoing care.

Strategy 2.4	Reduce fragmentation among health care programs and services.
Objective #3	Increase the proportion of persons with access to clinical preventive services.
Strategy 3.1	Increase public awareness of the importance of healthy lifestyles, clinical preventive service guidelines, and how to access preventive services.
Strategy 3.2	Increase provider knowledge of basic clinical preventive services guidelines, follow-up counseling, and funding.
Strategy 3.3	Increase promotion of and access to clinical preventive services through increases in funding and changes in policies and practices.
Strategy 3.4	Increase the availability of programs that provide clinical preventive services.
Objective #4	Increase the cultural competency and cultural sensitivity of health care providers.
Strategy 4.1	Identify best practices related to increasing the cultural competency and cultural sensitivity of health care providers.
Strategy 4.2	Increase availability of and participation in continuing education that promotes cultural competency and cultural sensitivity for health care providers.
Strategy 4.3	Increase availability of and participation in training that promotes cultural competency and cultural sensitivity among students in health care professional education programs.
Strategy 4.4	Increase the number of minority students in the health care professions in order to promote greater attention to and understanding of issues related to cultural competency and cultural sensitivity in health care education and practice.
Objective #5	Increase the proportion of persons with long term care needs who have access to the continuum of long term care services.
Strategy 5.1	Increase public awareness of the availability of services and how to access them.

- Strategy 5.2 Increase health care provider knowledge of long term care service options and available funding resources.
- Strategy 5.3 Develop and implement mechanisms for linking individuals and families who need long term care services with appropriate resources.
- Strategy 5.4 Increase the range of affordable long term care service options.
- Strategy 5.5 Encourage the development of long term care services that promote and prolong independence and that strengthen family support systems.
- Strategy 5.6 Reduce fragmentation and promote continuity among providers of long term care health services.
- Strategy 5.7 Promote access to long term care services for all persons, including rural and minority populations. Explore utilization of telemedicine and other alternative delivery systems.

Maternal / Infant Health

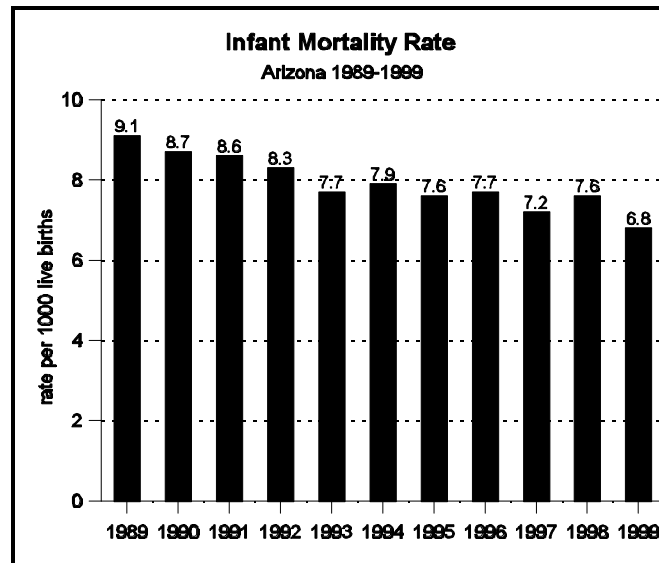
Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social well-being. As of 1995, the U.S. infant mortality rates ranked 25th among industrialized nations. In the past decade, critical measures of increased risk of infant death, such as new cases of low birth weight (LBW) and very low birth weight (VLBW), actually have increased in the United States.

Four causes account for more than half of all infant deaths: birth defects, disorders relating to short gestation and unspecified LBW, sudden infant death syndrome (SIDS), and respiratory distress syndrome. The leading causes of neonatal death in 1997 were birth defects, disorders related to short gestation and LBW, respiratory distress syndrome, and maternal complications of pregnancy. After the first month of life, SIDS is the leading cause of infant death, accounting for about one-third of all deaths during this period. Maternal age also is a risk factor for infant death. Mortality rates are highest among infants born to young teenagers (aged 16 years and under) and to mothers aged 44 years and older.

In Arizona, infant mortality data shows great disparity among ethnic groups. Recent studies suggest that there are many more factors involved in this disparity than adequate prenatal care. The Perinatal Periods of Risk Model is used to explore other variables such as dietary habits, family support systems and degree of acculturation that may impact birth outcomes.

Breastfeeding is an important contributor to overall infant health because human breast milk presents the most complete form of nutrition for infants; therefore, the American Academy of Pediatrics recommends that infants be breastfed for the first 6 months of life at a minimum. Breastfeeding rates have increased over the years, particularly in early infancy. However, breastfeeding rates among women of all races decrease substantially by 5 to 6 months postpartum.

Spina bifida and other neural tube defects are preventable birth defects. The occurrence of these disorders could be reduced by more than half if women consumed adequate folic acid before and during pregnancy. In 1992-94, the proportion of women of childbearing age reporting consumption of the recommended level of folic acid (400 micrograms) was 21 percent. Today, many cereals and bread products are enriched with folic acid and the recommended level is contained in most multivitamins.



Objective #1 Reduce Infant Mortality (Death Within First Year of Life).

Strategy 1.1 Provide support for family planning, early case finding of pregnant women and spacing of children.

Strategy 1.2 Analyze rates of infant deaths among different racial/ethnic groups to develop approaches to reducing disparity.

Strategy 1.3 Examine the content of prenatal care in Arizona to identify opportunities for improvement.

Strategy 1.4 Examine maternal morbidity and mortality in AZ, analyzing causes of morbidity as well as related complications.

Strategy 1.5 Support Women's Health efforts, expand use of the Perinatal Periods of Risk model and support efforts to address chronic women's health conditions that put women at risk during pregnancy.

Objective #2 Increase the Proportion of Very Low Birth Weight² Infants Who Are Delivered At Level III Hospitals or Subspecialty Perinatal Centers.

Strategy 2.1 Review births at II EQ's (Level II facilities with Enhanced

²less than 1500 grams or 3 lbs. 4 oz.

Qualifications) to determine appropriateness and outcome. Should II EQ's be included in the count of Subspecialty Perinatal Centers?

Objective # 3 Increase the Proportion of Pregnancies Begun With an Optimum Folic Acid Level. (Consumption of at least 400 ug of folic acid each day from fortified foods or dietary supplements by non-pregnant women aged 15 to 44 years)

Strategy 3.1 Increase awareness of the need for a folate-adequate diet through direct marketing to the Arizona Public.

Strategy 3.2 Increase awareness of the need for a folate-adequate diet by working through primary care providers.

Strategy 3.3 Increase awareness of the need for a folate-adequate diet by working through programs that serve women of childbearing years and their families.

Objective #4 Increase the proportion of mothers who breastfeed their babies.

Strategy 4.1 Increase public awareness and acceptance.

Strategy 4.2 Promote policies that encourage breastfeeding in the workplace and at schools and child care settings.

Strategy 4.3 Advocate for public and private insurance coverage for breastfeeding support services and equipment.

Strategy 4.4 Increase training for health care providers on breastfeeding and its benefits.

The first-ever *US Surgeon General's Report on Oral Health* released in 2000, reports a neglected epidemic of dental disease in the United States. However, dental problems have often been considered as less significant than other health issues. This lack of attention has substantial costs for affected individuals and society. For many, oral conditions severely interfere with eating, sleeping, speaking, learning, working and playing. Oral health is inseparable from overall health and well-being.

The good news is that most oral diseases are preventable. Even so, tooth decay remains the most common chronic disease among children: five times more common than asthma and seven times more common than hay fever. When compared to the nation, Arizona children fare poorly. Estimates indicate that more Arizona children suffer from tooth decay than the national averages. In Arizona, 5% of children ages 6 months through 2 years have had tooth decay. By the time children reach 11 to 13 years, over 65% have experienced tooth decay and by the time adults reach age 45, more than 99 percent have had decay.

Some of the methods to prevent dental diseases include dental sealants, drinking fluoridated water and having access to dental care. The high levels of dental disease in Arizona and the high treatment costs they generate can be managed given the use of proper preventive methods. Yet, Arizona residents suffer from higher rates of disease and benefit less from proven preventive methods. Only 8% of eight year old children have dental sealants and only 47% of Arizona's population on public water supplies benefit from fluoridated water. Additionally, many Arizonans lack regular preventive dental care. A recent survey revealed that 21% of Arizona adults and 31% of Arizona children have never had a dental check-up.

One barrier to receiving dental services is access to dental care providers. Arizona suffers from an unequal distribution of dental care providers (dentists and dental hygienists). More providers practice in or near major communities including Greater Phoenix, Flagstaff, and Tucson. This distribution results in underserved areas and populations. Individuals residing in rural areas may lack adequate transportation or have unreasonable travel distances which affect access to providers. In addition to the uneven distribution of providers, there may exist an inadequate supply. Arizona's ratio of dentist-to-population is lower than the US average. Arizona has one dentist to every 2,250 people whereas the national average is one dentist to every 1,740 people, a difference of 510 people per dentist.

Additionally, Arizonans report one of their major barriers to receiving dental services relates to finances. While 24% of Arizonans lack medical insurance, over 44% of adults and 38% of children lack dental insurance.

In summary, more Arizonans have dental disease than found nationally, yet benefit less from proven preventive methods while many report difficulty accessing dental services. Additional efforts and expansion of current initiatives are needed to improve the oral health for children and adults in this state.

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| Objective #1 | Increase the proportion of children, adults, and older adults who receive dental care each year. |
| Strategy 1.1 | Promote enrollment in and utilization of publically funded dental insurance programs. |
| Strategy 1.2 | Ensure that Arizona has maximized the number of Dental Health Professional Shortage Areas for which it is allowed. |
| Strategy 1.3 | Promote annual dental examinations as a minimum standard. |
| Strategy 1.4 | Establish (by 2002) new dental care delivery systems, e.g. school-based, mobile, portable, etc.) |
| Strategy 1.5 | Increase dental providers in dentally underserved areas of the state. |
| Objective #2 | Increase the proportion of residents with comprehensive dental insurance. |
| Strategy 2.1 | Promote employer-based dental insurance. |
| Strategy 2.2 | Expand (by 2005) comprehensive dental coverage to adults through state-funded health insurance programs (i.e., AHCCCS, KidsCare, sliding fee, etc.) |
| Strategy 2.3 | Seek additional funding for dentally-uninsured, low-income Arizonans. |
| Objective #3 | Increase the proportion of residents served by community water systems with optimally fluoridated water. |
| Strategy 3.1 | Promote water fluoridation in Arizona communities. |

- Strategy 3.2 Establish (by 12/31/2001) a water fluoridation data monitoring system.
- Objective #4 Reduce the proportion of children who have ever had tooth decay. (Measured at preschool and elementary levels)**
- Strategy 4.1 Increase education of all health professionals on the importance of oral health.
- Strategy 4.2 Increase public education on the importance of oral health.
- Strategy 4.3 Expand the state-sponsored dental sealant program statewide.
- Objective #5 Reduce the proportion of children who currently have untreated tooth decay. (Measured at preschool and elementary levels)**
- Strategy 5.1 Educate health professionals on appropriate early oral assessments, diagnosis, referrals and treatments for children.
- Strategy 5.2 Increase education of health professionals on importance of early oral assessments, diagnosis, appropriate referrals and treatments for children.
- Strategy 5.3 (See 1.4 above).
- Strategy 5.4 Increase dental providers in dentally underserved areas of the state.
- Strategy 5.5 Promote enrollment in and utilization of publically funded dental insurance programs.